

**Claims**

- 5 1. A drive mechanism for food and produce handling and cleaning equipment incorporating a rotating barrel in which are mounted a plurality of shafts aligned with their longitudinal axes parallel to the longitudinal axis of the barrel, the drive mechanism including a single motor adapted to drive via a V belt drive the shafts which are linked and driven by a toothed timing belt slave.
- 10 2. A drive mechanism for food and produce handling and cleaning equipment incorporating a rotating barrel in which are mounted a plurality of shafts aligned with their longitudinal axes parallel to the longitudinal axis of the barrel, the drive mechanism including a single drive motor adapted to drive via a gearbox and a number of adjacent  
15 V-belts at least some of the plurality of shafts, the shafts additionally including toothed pulleys or sprockets driven by a timing belt that ties rotation of all the shafts together to maintain constant rotation of the shafts under the drive of the single drive motor.
- 20 3. A drive mechanism as claimed in claim 2 wherein each shaft has a pair of pulleys or sprockets the first of which is driven by the V-belts and the second of which is linked by the timing belt.
4. A drive mechanism as claimed in claim 2 or claim 3 wherein the V-belt drive is by way of a plurality of separate V-belts or a single multi V-belt configured with a plurality of adjacent V shaped surfaces.
- 25 5. A drive mechanism as claimed in any one of claims 1 to 4 wherein the timing belt is a toothed timing belt adapted to drive toothed pulleys or sprockets on each shaft.
6. A drive mechanism as claimed in claim 2 and substantially as hereinbefore described with reference to the accompanying drawing.
- 30 7. A drive mechanism for a rotary barrel brush washer for use in the food and produce handling industry for washing vegetables such as carrots, potatoes, and parsnips, other root crops, fruit and shellfish.

8. A rotary barrel brush washer including the drive mechanism claimed in claim 1 or claim 2 and substantially as hereinbefore described with reference to the accompanying drawing.

## Claims

Patented Nov. 10, 1975

1. A drive mechanism for food handling, food processing and cleaning equipment incorporating a generally horizontally orientated rotating barrel in which are mounted a plurality of shafts aligned with their longitudinal axes parallel to the longitudinal axis of the barrel, the drive mechanism including a single motor adapted to drive by way of separate V-belts or a single V-belt configured with a plurality of adjacent V shaped surfaces the shafts, the arrangement of the V-belts or V-belt and a toothed timing belt slave yield a constant speed and shared load to the shafts.
2. A drive mechanism for food and produce handling and cleaning equipment incorporating a generally horizontally orientated rotating barrel in which are mounted a plurality of shafts aligned with their longitudinal axes parallel to the longitudinal axis of the barrel, the drive mechanism including a single drive motor adapted to drive via a gearbox at least some of the plurality of shafts by either a plurality of separate V-belts or a single multi V-belt configured with a plurality of adjacent V shaped surfaces, the arrangement of the V-belt or V-belts and toothed pulleys or sprockets on the shafts driven by timing belt means yields a constant speed and shared load on all of the shafts under the drive of the single drive motor.
3. A drive mechanism as claimed in claim 2 wherein each shaft has a pair of pulleys or sprockets the first of which is driven by the V-belts and the second of which is linked by the timing belt means.
4. A drive mechanism as claimed in any one of claims 1 to 3 wherein the timing belt means is a toothed timing belt adapted to drive toothed pulleys or sprockets on each shaft.
5. A drive mechanism as claimed in any one of claims 1 to 3 wherein a single timing belt is provided to drive toothed pulleys or sprockets on all of the shafts.
6. A drive mechanism as claimed in claim 2 and substantially as hereinbefore described with reference to the accompanying drawing.
7. A rotary barrel brush washer including the drive mechanism claimed in claim 1 or claim 2 and substantially as hereinbefore described with reference to the accompanying drawing.